

The Sony NEWS Family of Fileservers

COMBINING
MACINTOSH EASE
WITH
UNIX POWER.

Question: What's it take to get a Macintosh® network with UNIX® power? A Macintosh network with such a wide range of features that everything else looks basic in comparison?

Answer: One Sony NEWS® Fileserver and uShare Plus™ software.

It's a combination the competition can't begin to match. One reason is because NEWS servers are UNIX-based. And uShare Plus software utilizes the strengths of the UNIX operating system to its fullest to implement a powerful server for demanding Macintosh-compatible applications. Macintosh-compatible applications with services for file sharing, print spooling, virtual disk, electronic mail and network routing. All available at your fingertips.

uShare Plus also offers a host of innovative network features developed by Sony and Information Presentation Technologies (IPT), Inc. These features include a network administration package for easy installation and management. A bi-directional and automatic backup/retrieval system to protect against data loss. A network software licensing application to enforce network site licensing of Macintosh-compatible applications. And a LocalTalk® card to provide affordable network expansion options.

The Advantages of uShare Plus

FILE SERVER

Our file server software is fully Apple Filing Protocol (AFP) compliant, so all AFP-compliant Macintosh applications will work without modification. It provides connectivity through AppleShare®, allowing you to access server volumes with the familiar AppleShare user interface, including the "Control Panel" and "Chooser."

Thus, installing a NEWS Fileserver in your office requires no new training or additional software for any networked Macintosh.

Through uShare Plus, the administrator can publish many volumes on a single hard disk instead of just one with AppleShare. By creating many published volumes, each user can have his or her own password-protected private volumes.

PRINT SPOOLER

NEWS Fileservers support print spooling to PostScript® compatible output devices, such as LaserWriter® printers, from either Macintosh computers or UNIX-based workstations. Printers may be connected via LocalTalk networks, or through serial or parallel ports on a NEWS Fileserver. Multiple printers and spoolers per system can

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be easily managed by UNIX for maximum throughput and user convenience. Print commands from the Macintosh can be freely intermixed with those from UNIX users at Sony NEWS workstations and dumb terminals that can access the host's services.

VIRTUAL DISK

The virtual disk feature in uShare Plus, once launched, permits a Macintosh user on the network to run applications from the server without an internal hard disk. Users avoid the expense of local hard disks for each Macintosh on the network by storing the Macintosh operating system, applications and data files on the NEWS server. Macintosh computers using virtual disks on the NEWS are freed from having to have a system floppy in the floppy drive, as the Macintosh utilizes the system folder located in the user's virtual disk on the NEWS. This provides users with much larger system disk capacity, as well as password security.

ELECTRONIC MAIL

uShare™ software's unique electronic mail system gives you e-mail at your fingertips. The "Mail DA" is a Macintosh desk accessory, and is compatible with the globally accessible UNIX e-mail system, the most popular and widely used electronic-mail system in existence. Because the Mail DA is a desk accessory, it can be accessed at any time from within any application. Access is password-protected for privacy, and you're alerted to the arrival of new mail by a chirp and flashing Apple symbol on the menu bar. Priority mail can pop-up a dialog box directly on the Macintosh screen for immediate notification.

EASY INSTALL

The Easy Install software loads uShare Plus onto the NEWS Fileserver via commands from your

Macintosh. You use the familiar Macintosh interface—no UNIX commands are needed. The Easy Install program and documentation guide you through each step, making uShare Plus software extremely simple to install.

Using Easy Install, you can configure the NEWS Fileserver for a simple LocalTalk network or as a sub-network on a larger Ethernet network. The NEWS server can also function as a gateway router between Ethernet, LocalTalk, TCP/IP and DDP-IP networks.

EASY ADMINISTRATOR

The Easy Administrator software lets you configure and administer a NEWS Fileserver directly from a Macintosh computer. As with Easy Install, very minimal UNIX knowledge is required.

BI-DIRECTIONAL AND AUTOMATIC BACKUPS

Revolutionary in the Macintosh world, Easy Administrator offers an exclusive utility which backs up local Macintosh disk drives which are published on the network to the NEWS Fileserver. You select the hard disk and the time—even at night or on weekends—so backups can be performed when network traffic is low. This utility helps protect valuable data from possible loss or file corruption in the event of a power outage or catastrophic server or client failure.

The NEWS Fileserver can also be backed-up in the same manner as Macintosh hard disks. Select the volumes and the starting time and leave the rest to Easy Administrator.

Restoring data is simple with Easy Administrator. To access the stored data, simply select the volume or individual files from the backup and the Easy Administrator will restore the requested file or volume to the last saved state.

A leader in data storage technology, Sony has a full range of backup devices that can hold large volumes of information. These products include erasable optical disks, Digital Audio Tape (DAT) and QIC streaming tape devices.

NETWORK SOFTWARE LICENSING

The Easy Administrator also provides network software licensing (the Application Server), a new concept to the Macintosh network server environment. Application software can be placed in a shared volume on the NEWS Fileserver and, using Easy Administrator, a limit can be placed on how many users and which users can concurrently operate the applications. Then, based on the number of copies purchased, multiple Macintosh computers can simultaneously run the same application.

NETWORK EXPANSION CARDS

A LocalTalk card designed for NEWS Fileservers offers flexibility in network configuration. This card fits into one of the three expansion slots standard on all NEWS servers. Multiple LocalTalk cards may be configured so that network traffic is reduced, and network throughput is increased significantly.

Additionally, an Ethernet port is built in to every NEWS Fileserver, providing a means to gateway between LocalTalk, EtherTalk and TCP/IP (a common network protocol for UNIX). NEWS Fileservers also provide network routing between LocalTalk and EtherTalk networks as well as TCP/IP networks.

MACINTOSH AND UNIX CO-EXISTENCE

NEWS Fileservers and uShare Plus software combine to function as full-featured Macintosh servers. And, since NEWS Fileservers are UNIX-based, both Macintosh and standard UNIX software can co-exist on the same file system.

uShare Plus software design permits easy interchange of files and data between Macintosh and UNIX users. ASCII text files can be directly opened for applications by either user. Macintosh users access all files through the standard icon-based Macintosh user interface. UNIX users view and access files using the standard UNIX commands. File permissions are viewed and set for both Macintosh and UNIX users via Easy Administrator or through the standard UNIX convention.

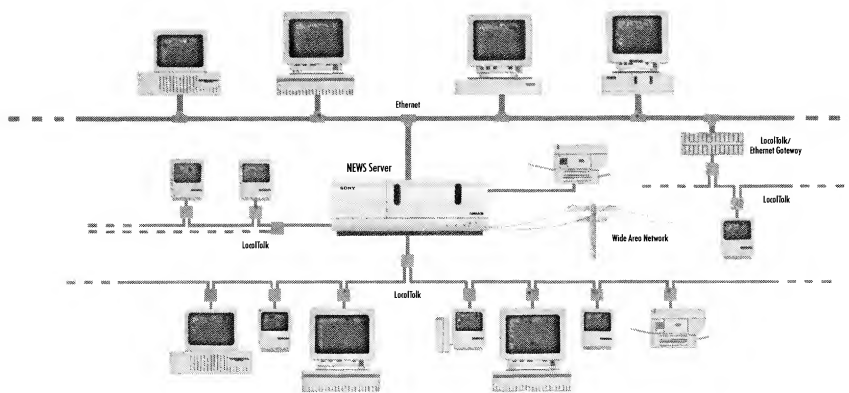
Graphics files can be shared between UNIX and the Macintosh. Images may be captured by the NEWS server through a wide variety of Sony video peripherals. These include video and still-image cameras, color scanners, and video laser disk players. Images can be stored for retrieval by both Macintosh and UNIX environments. At 1.5MB per image, the NEWS server with an erasable optical drive can store numerous images on a single 594 MB removable media cartridge.

GENERAL NETWORK ADMINISTRATION

In addition to configuring the uShare Plus software on the NEWS server, Easy Administrator automates the configuration of the Apple Filing Protocol (AFP) system, electronic mail, the virtual disk and print spoolers. With Easy Administrator, you can even reboot and power-off the server from your Macintosh.

The Easy Administrator software lets you configure print spoolers on the network automatically. Easy Administrator can install print spoolers for any PostScript printers on the network, whether connected to LocalTalk networks, or connected to other UNIX servers via Ethernet on a distributed network. Once the printers are configured, Macintosh computers, PCs, or UNIX workstations can access print spoolers at any time.

You can also add, modify, and delete users, groups, and server volumes on the network from a



Macintosh using Easy Administrator's simple to use user interface.

Easy Administrator also includes powerful network reporting utilities designed to assist in monitoring network activity. They enable you to track user activity on the network by the number of opened files, the type of resources used, and the applications launched on a daily and monthly basis. And these reporting utilities can help troubleshoot network traffic bottlenecks and over-worked applications.

OPEN NETWORKING

With the LocalTalk card and uShare Plus, NEWS Fileservers can support Macintosh users over LocalTalk and EtherTalk using AppleShare. NEWS servers can also provide network gateway access to Macintosh computers, providing connectivity into a heterogeneous network of UNIX computers. Connectivity to Wide Area Networks (WAN), also provides Macintosh users with access to other Macintoshes, workstations, and mainframes across the country from their own computer.

NEWS Family of Fileservers

The Sony NEWS family of high performance, UNIX-based file servers adds power and productivity to Apple's Macintosh AppleShare networks. NEWS Fileservers not only offer compact

high performance, but also provide communication across a heterogeneous network of machines from different manufacturers. Everything from personal computers to mainframes can be coherently integrated into the same network. And with the wide range of NEWS Fileservers available, you can configure a Macintosh network file server to fit your budget, performance, and expansion requirements.

FIRST SERVER

The First Server is Sony's most affordable Macintosh fileserver. For the price of a Macintosh, you get the multi-tasking power of a UNIX system designed for intensive networking and I/O capacity.

RISC SERVER

The superb processing speed, large memory capacity and highly expandable disk storage make this server ideal for the most demanding Macintosh and UNIX networking environment. Additional Ethernet and LocalTalk boards can be added as needed, and the optional DAT tape drive can back up more than 1 gigabyte of data unattended. Use of the UNIX System V.4 operating system provides all the latest UNIX standards, which greatly simplifies networking to other UNIX systems.

For more information, or to arrange a demo, call (408) 434-6644.

Specifications

FEATURES		FIRST SERVER (NEWS 1750)	RISC SERVER (NEWS 3710)
CPU/MEMORY	Main Processor	68030@25MHz	R3000@20Mz
	Floating-point Processor	68882@25MHz	R3010@20MHz
	Main Memory	4MB-32MB	8MB-128MB
	Cache Memory	16KB	128KB
INTERNAL STORAGE DEVICES	Floppy Drive	3.5" 1.44MB	3.5" 1.44MB
	SCSI Hard Disk	286MB	286MB/640MB (Optional)
	Tape Drive	125MB	150MB (Optional)
OPTIONAL EXTERNAL STORAGE DEVICES	SCSI Hard Disk	156MB	156MB
		286MB	286MB
		640MB	640MB
	Tape Drive	—	150MB Tape
	DAT	1.3GB DAT	1.3GB DAT
	Optical	594MB	594MB
INTERFACES	RS-232 Serial ports	2	2
	Centronics Parallel Port	1	1
	Ethernet Port	1	1
	SCSI Bus Port	1	1
	Keyboard/Mouse port	1	1
	I/O Expansion slots	3	3
	Microphone/Speaker	—	✓
SOFTWARE	NEWS-OS	UNIX 4.3 BSD	UNIX System V.4
	X Window System	✓	✓
	uShare Plus	✓	✓
NETWORKING	LocalTalk	✓	✓
	EtherTalk	✓	✓
	NFS	✓	✓
	TCP/IP	✓	✓
	XNS	✓	✓

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